United Nations ECE/CES/2014/15/Add.10

Economic and Social Council

Distr.: General
3 March 2014

English only

Economic Commission for Europe

Conference of European Statisticians

Sixty-second plenary session
Paris, 9-11 April 2014
Item 8 (a) of the provisional agenda
Reports on the work of the Conference of European Statisticians, its Bureau and Teams of Specialists

Report of a workshop on the modernisation of statistical production and services

Prepared by the Secretariat

Addendum

Summary

This document presents the outcome of the Workshop on the Modernisation of Statistical Production and Services, which took place on 25-27 November 2013 in Geneva. The workshop was attended by representatives of the High-Level Group for the Modernisation of Statistical Production and Services, the Bureau of the Conference of European Statisticians, and various expert groups whose work is related to the modernisation of statistics. The workshop reviewed the outcomes of the international collaboration projects carried out under the High-Level Group for the Modernisation of Statistical Production and Services during 2013, and agreed the priorities for similar projects in 2014.

This document is submitted to the Conference of European Statisticians for information.

GE.14-21094

1421094

Please recycle

I. Introduction

1. The Workshop on the Modernisation of Statistical Production and Services was held in Geneva, Switzerland, from 25-27 November 2013. It was attended by representatives of the High-Level Group for the Modernisation of Statistical Production and Services (HLG), and twenty-two expert groups and projects whose work is related to the modernisation of statistics.

2. Ms. L. Bratanova, Director of the UNECE Statistical Division, opened the workshop and welcomed participants. She described the purpose of the Workshop and outlined the agenda:

(a) Reporting on the 2013 projects;

(b) Standards-based modernisation: An integrated global approach;

(c) Issues and challenges;

(d) Deciding the way forward.

3. All background documents and presentations for the workshop are available at www1.unece.org/stat/platform/display/hlgbas/2013+Workshop.

4. The keynote presentation was given by Mr G. van der Veen (Netherlands). He presented the work of HLG, including the outputs so far. He stressed the move from theory to implementation, and presented the new governance structure for activities under HLG.

II. Session reporting on the 2013 projects

A. Frameworks and standards for statistical modernisation

5. The aims, objectives and outcomes of this project were presented:

(a) A review of the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM), leading to new versions of both models by the end of 2013;

(b) A review of the role of geo-spatial standards in the modernisation of statistics;

(c) A review of the Neuchâtel Classification Model, resulting in its incorporation as an annex of the GSIM;

(d) Sharing ideas and experiences on the early implementation of the GSIM;

(e) Mapping of the GSIM to the information models of Data Documentation Initiative (DDI) and Statistical Data and Metadata eXchange (SDMX);

(f) The development of five DDI profiles for official statistics.

6. Points raised during the discussion included:

(a) The possibility of a central store for mappings, including a mapping done by the Organisation for Economic Cooperation and Development (OECD) between the GSIM and the .Stat information model. The proposed catalogue for the Common Statistical Production Architecture (CSPA) could take on this role;

(b) The new version of the GSBPM does not have a specific archive phase, recognising that this is part of data and metadata management, and is carried out throughout the statistical production process;

(c) Ensuring the links between related standards, and how to manage the impact of a revision of one standard on the other related standards;

(d) The possibility of also creating SDMX profiles;

(e) The possibility of further elaborating the role of methodology within the GSIM in collaboration with the recently established Methodology Network.

B. Common statistical production architecture

7. This project is preparing a standard for a common statistical production architecture, to be released at the end of 2013. Several drafts have been released for comment during the year, and version 1.0 is currently in preparation. The proposed architecture has been tested in a proof of concept, involving components built by Australia, Canada, Italy, the Netherlands and New Zealand, and implemented in different statistical production environments by Italy, New Zealand and Sweden. The proof of concept showed that:

(a) CSPA is practical and can be implemented by various agencies in a consistent way;

(b) CSPA statistical services can fit into existing processes;

(c) CSPA compliant components can be used on different technology platforms;

(d) CSPA compliant services can be easily swapped;

(e) The same statistical service can be re-used by different process configurations.

8. Points raised during the discussion included:

(a) Implementing CSPA will be a cultural challenge as well as a technical one;

(b) A checklist of how to start implementing CSPA would be a useful addition to the documentation;

(c) CSPA is seen as fundamental for the European Statistical System, where further piloting and testing is planned;

(d) The extent of inter-dependence between CSPA, GSIM and GSBPM;

(e) The importance of involving subject-matter specialists in the re-design of processes;

(f) Licensing issues could be a challenge;

(g) The sequence for tackling different layers of architecture, and the importance of starting with the business architecture rather than the technical architecture.

9. The interim project board presented the sequence of modernisation activities and suggested future steps. The presentation stressed that the full benefit of standards such as CSPA can only be realised when it is used in practice.

III. Standards-based modernisation: an integrated global approach

10. This session considered how several international initiatives outside the control of the HLG also support the modernisation agenda, and how unofficial coordination helps to ensure coherence between these activities. The initiatives presented were:

(a) The Strategic Advisory Board for the Asia-Pacific region – a group of chief statisticians recently created under the United Nations Economic and Social Commission for Asia and the Pacific, which will be a regional partner to HLG;

(b) The Statistical Network, a group of seven national statistical organisations with a set of collaborative projects;

(c) The European Statistical System Vision Infrastructure Programme, an initiative to modernise statistical production for Eurostat and the countries of the European Statistical System;

(d) The OECD Statistical Information Systems Collaboration Community, a group of statistical organisations collaborating to develop a set of statistical software tools.

11. Issues raised during the discussions included:

(a) HLG should promote and coordinate global initiatives for regional implementation;

(b) The importance of reaching out to other regions;

(c) The value of having information on different initiatives publicly available on the Internet;

(d) Possible models for funding and governance of collaboration activities;

(e) Building links to relevant initiatives outside the official statistics community.

IV. Issues and challenges

12. The Executive Board presented its views on priorities for future activities, including:

(a) Communicating the standards underlying modernisation;

(b) Practical implementations of CSPA;

(c) Standardising best practices related to methodology;

(d) Building capabilities for official statistics;

(e) Big Data and open data;

(f) Benchmarking processes and roles across statistical organisations.

13. The four modernisation committees then presented their views on priority activities. The Steering Committee on Human Resources Management and Training also presented their views on the human resource dimension of modernisation.

14. Issues raised during the discussions included:

(a) The need for guidelines for top managers to implement organisational change and re-structuring;

(b) The international statistical community needs a strategy to react to the rise of "fast food data", data that are released quickly by the private sector, but are often of poor quality;

(c) The challenges regarding Big Data are more strategic than technical;

(d) Better links with universities would help to ensure that new recruits have the necessary skills to meet new requirements;

(e) A repository of skills profiles could be useful for exchanging ideas as roles within statistical organisations change;

(f) The challenges of modernisation activities can help to motivate more capable staff;

(g) Shared experiments can be very useful for building collective knowledge;

(h) The Executive Board has a role to ensure there is no duplication between modernisation committees;

(i) Integrating Big Data with other sources is an important challenge;

(g) The potential benefits of working with intermediaries for both data collection and dissemination;

(k) How to "sell" standards within statistical organisations.

15. During small group discussions, priorities were identified for each modernisation committee as listed under the following headings.

A. Modernisation Committee on Organisational Frameworks and Evaluation

16. The following priorities were identified for this modernisation committee:

(a) Change management;

(b) Organisational frameworks for collaboration;

(c) Legal and licensing issues;

(d) Building competencies within statistical organisations;

(e) Guidelines for managers, including best practices for implementing modernisation activities;

(f) Evaluation of modernisation activities, including costs and benefits;

(g) Promoting and communicating modernisation activities, internally and externally.

B. Modernisation Committee on Production and Methods

17. The following priorities were identified for this modernisation committee:

(a) Implementation of CSPA, including strategy, guidelines and catalogues of services and artefacts;

(b) Big Data;

(c) Moving from CSPA to a Common Statistical Production Environment.

C. Modernisation Committee on Products and Sources

18. The following priorities were identified for this modernisation committee:

(a) Mobile devices for collection and dissemination;

(b) Big Data;

(c) Open data;

(d) Intermediaries as strategic partners;

(e) Mixed mode data collection and integration;

(f) Communication with users, including marketing official statistics;

(g) Improved access to micro-data.

D. Modernisation Committee on Standards

19. The following priorities were identified for this modernisation committee:

(a) Promoting the family of standards needed for modernisation;

(b) Governance, maintenance and integration of key standards (GSBPM, GSIM, DDI, SDMX);

(c) Standards to support the implementation of CSPA;

(d) Semantic web standards;

(e) Links to external standards, e.g. geospatial standards, data formats etc.;

(f) Glossary of metadata / modernisation terminology;

(g) Quality indicators.

V. Priorities for future work

20. This session started with a plenary discussion to identify possible priorities for HLG projects for 2014. The following topics were identified:

(a) Licensing and intellectual property issues (models for sharing software, on-going support for development);

(b) Guidelines for managers about change management in relation to modernisation;

(c) Evaluation, cost/benefit of modernisation;

(d) CSPA (implementation, enablers);

(e) Big data (as a capability, not just IT, legal authority regarding access, privacy, experiments);

(f) Implications of mobile devices for data collection and dissemination;

(g) GSIM operationalisation/maintenance /integration – DDI, SDMX, CSPA;

(h) Promotion of GSIM, GSBPM and CSPA;

(i) Semantic web issues (including linked open data and standards);

(j) Strategic communication between top managers to promote HLG results and get others involved;

(k) Practical examples of results of projects and their benefits.

21. Participants then split into small groups to discuss priorities. CSPA implementation and Big Data were identified as top priorities. CSPA implementation could include relevant licensing issues, and could be linked to GSIM implementation. A possible project for 2015 could be the development of an engagement strategy, covering points b, c, h and j in the list above.

22. In his summary, the Chair noted that the work of the HLG is delivering tangible progress each year. The annual workshop provides a unique forum for collaboration between top managers and experts, providing the atmosphere of a "fellowship of modernisation".

23. The workshop participants thanked those members of the HLG that would be leaving their posts in the near future, including the chair, for their commitment to establishing modernisation of statistical production and services as a key priority for the international statistical community.